



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,977	08/26/2003	Akihiro Yanagita	65,017-185	6714
43935 7590 04/01/2008 FRASER CLEMENS MARTIN & MILLER LLC 28366 KENSINGTON LANE PERRYSBURG, OH 43551				
EXAMINER				
CHEN, BRET P				
ART UNIT		PAPER NUMBER		
1792				
NOTIFICATION DATE		DELIVERY MODE		
04/01/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

miller@fraser-ip.com
sloan@fraser-ip.com
crooks@fraser-ip.com

Office Action Summary

Application No.

10/649,977

Applicant(s)

YANAGITA ET AL.

Examiner

BRET CHEN

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-24 and 26-44 is/are pending in the application.
- 4a) Of the above claim(s) 19-24 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 44 is/are allowed.
- 6) ☒ Claim(s) 26, 27 and 38-43 is/are rejected.
- 7) ☒ Claim(s) 28-37 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims 19-24, 26-44 are pending in this application, which is an RCE of Serial Number 10/649977.

The amendment after final dated 2/19/08, previously unentered, has now been entered into the application. Amended claims 26, 44 are noted. In view of the arguments presented, the 112 rejection has been withdrawn. In view of the amendment, the previous art rejection has been withdrawn in view of the present art rejection.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/14/08 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 26-27, 38-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reighard et al. (6,173,864). Reighard discloses a method for accurately dispensing controlled amounts of viscous material such as during printed circuit (PC) board assembly by using a system which includes a pressurized supply of the viscous material, a dispenser connected with the pressurized supply and a feedback control for ensuring that a discrete dispensed amount corresponds closely to the desired dispensed amount for a particular application (col.2 lines 3-10). The different methods of feedback control include changing pressure of the pressurized supply after measuring a dispensed amount and comparing the dispensed amount with a stored value representing the desired amount; changing an air operating pressure associated with the dispenser; adjusting the duration that the dispenser is maintained on to dispense the viscous material; or combination thereof (col.2 lines 22-32). They are preferably used in succession (col.2 lines 32-35). In one embodiment, a first amount of the viscous material is discharged from the dispenser, measuring the first amount of viscous material, comparing the first amount to a commanded or desired control amount stored in a memory device, and adjusting the pressure of the pressurized supply to correct for a difference between the first amount and the control amount (col.3 lines 1-8). Another method which may be used alternatively or in conjunction with the previously described method involves discharging a first amount of the viscous material from a dispenser valve, measuring the first amount of viscous material, comparing the first amount to a commanded control amount stored in a memory device, and adjusting a fluid operating pressure used to actuate the dispenser valve to correct for a difference between the first amount

and the commanded control amount. A nozzle may be utilized (col.6 lines 25-26) and the volume can be measured (col.4 lines 1-25). The dispensing step can be repeated (col.2 lines 22-44) and the viscosity of the material is disclosed (col.1 lines 13-19). However, the reference fails to specifically teach a compensation factor.

It is noted that the applicant defines compensation factor as the difference between a theoretical volume and an actual volume (paragraph 8). The reference clearly teaches of measuring the amount of viscous material (actual) and comparing it to a control amount (theoretical). It is the examiner's position that the reference meets the limitation of a compensation factor.

In addition, the reference teaches measuring a pressure to determine a theoretical volume. It is noted that the reference clearly teaches of measuring the amount of viscous material. A theoretical volume is already established. It would have been obvious to one skilled in the art to change the theoretical volume based on pressure measurements with the expectation of obtaining a more precise process of dispensing material.

The limitations of claims 27, 41-43 have been addressed above.

In claims 38-40, the applicant requires detecting differences between different compensation factors. It is the examiner's position that the reference clearly teaches of changing the theoretical values above. One skilled in the art could easily program the difference in theoretical values to flag a user that a disruption has occurred. It would have been obvious to utilize a detection flag with the expectation of obtaining better dispensation control.

Art Unit: 1792

Allowable Subject Matter

Claims 28-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 44 is allowed.

Response to Arguments

Applicant's arguments with respect to claims above have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRET CHEN whose telephone number is (571)272-1417. The examiner can normally be reached on 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. Chen/
Primary Examiner, Art Unit 1792
3/24/08